Amendment and Response to Office Action U.S. Patent Application Serial No. 10/550,223

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**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

1. (Currently amended) A high capacity filtration media consisting of

comprising a porous substrate impregnated with a composition consisting of a permanganate

and water, wherein the permanganate is a permanganate salt having a solubility in water

greater than that of potassium permanganate, wherein the concentration of permanganate salt

in the filtration media is approximately 8-25% permanganate salt by weight, and wherein the

filtration media is configured to remove contaminants from a high flow air stream wherein

the porous substrate comprises activated alumina and the filtration media comprises particles

with a nominal 1/8" particle size.

2. (Previously presented) The filtration media of claim 1, wherein the

permanganate salt is selected from the group consisting of sodium permanganate, magnesium

permanganate, calcium permanganate, barium permanganate, lithium permanganate and

combinations thereof.

3. (Previously presented) The filtration media of claim 1, wherein the filtration

media comprises at least about 13 to about 25% permanganate salt by weight.

4. (Previously presented) The filtration media of claim 1, wherein the filtration

media comprises at least about 15 to about 20 % permanganate salt by weight.

5. (Canceled).

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6. (Canceled).

7. (Previously presented) The filtration media of claim 1, wherein the

permanganate salt comprises sodium permanganate.

8. (Canceled).

9. (Currently amended) The filtration media of claim 1, wherein the porous

substrate further comprises activated alumina, a silica gel, a zeolite, a zeolite-like mineral,

kaolin, an adsorbent clay, activated bauxite, or a combination thereof, and wherein the

porous substrate is between about 40 and about 80% by weight of the filtration media.

10. (Previously presented) The filtration media of claim 9, wherein the zeolite or

zeolite-like mineral is selected from amicite, analcime, pollucite, boggsite, chabazite,

edingtonite, faujasite, ferrierite, gobbinsite, harmotome, phillipsite, clinoptilolite, mordenite,

mesolite, natrolite, garronite, perlialite, barrerite, stilbite, thomsonite, kehoeite, pahasapaite,

tiptopite, hsianghualite, lovdarite, viseite, partheite, prehnite, roggianite, apophyllite,

gyrolite, maricopaite, okenite, tacharanite, tobermorite and combinations thereof.

11-33. (Canceled).

34. (Currently amended) The filtration media of claim 1, wherein the filtration

media is configured to remove contaminants from an air stream moving through the filtration

media at a flow rate velocity of from 10 to 750 ft/min.

35. (Currently amended) The filtration media of claim 34, wherein the filtration

media is configured to remove contaminants from an air stream moving through the filtration

media at a flow rate velocity of from 60 to 100 ft/min.

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36. (Previously presented) The filtration media of claim 1, wherein the contaminants are selected from the group consisting of sulfur compounds, ammonia, chlorine, formaldehyde, urea, carbon monoxide, oxides of nitrogen, mercaptans, amines, isopropyl alcohol, ethylene and combinations thereof.